

# ***Climate-Friendly Decisions: Energy and Air Quality***

## **A Guide for State and Local Officials**

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### **5th State and Local Climate Change Partners' Conference**

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*Climate-Friendly Decisions*

# Energy and Air Quality



- **New EPA Guidebook provides a decision-making framework to help state and local officials make climate- friendly decisions**

- **Identifies nine opportunities to reduce GHGs through state and local programs and policies**

## Now

- ◆ Energy
- ◆ Air Quality

## Future

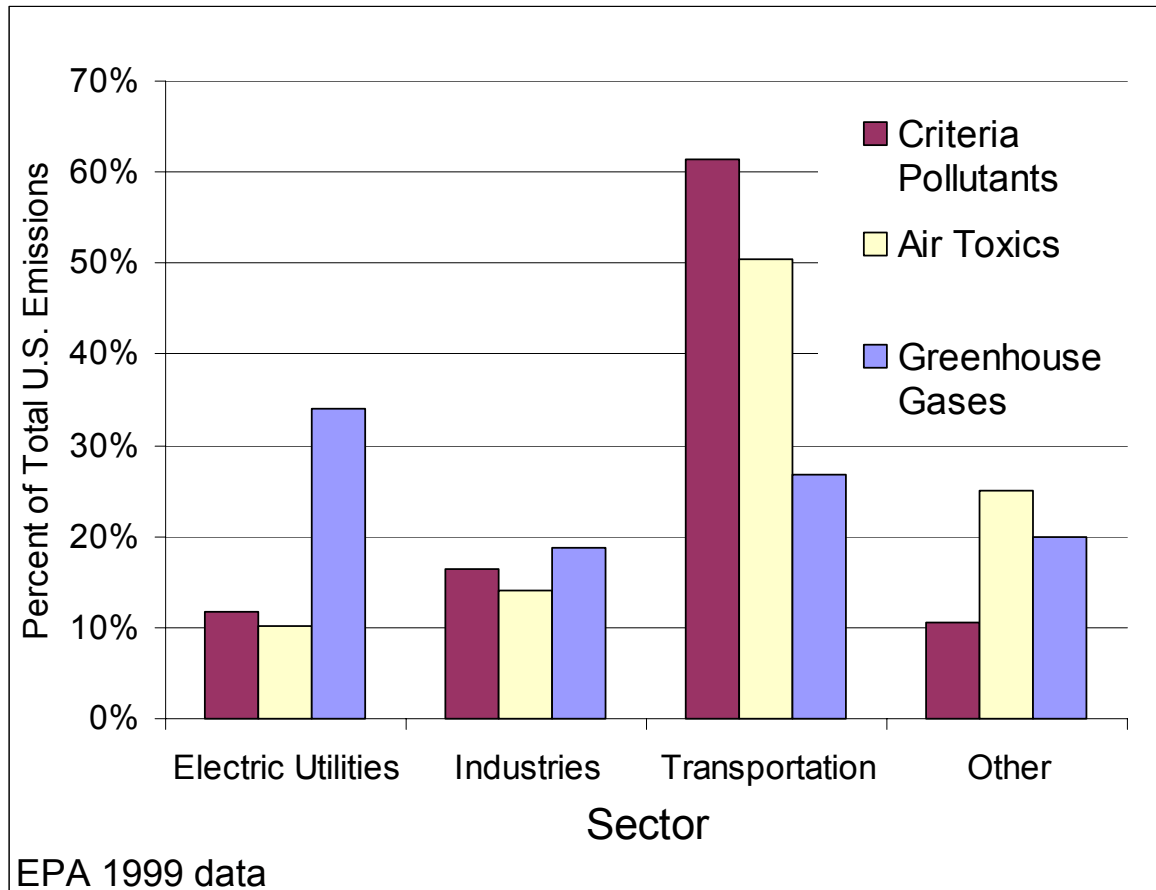
- ◆ Transportation / smart growth
- ◆ Public facilities and infrastructure
- ◆ Other

- **Provides detailed examples with sources of additional information and tools**

## *Climate-Friendly Decisions*

# GHGs and Air Pollutants

- Major sources of criteria pollutants and air toxics also emit GHGs
- The Guide identifies strategies that reduce both



*Climate-Friendly Decisions*

# Decision Makers

- **State Energy Offices, Public Utility Commissions**
- **State and Local Air Agencies**
- **Departments of Commerce and Economic Development**
- **Public and privately owned utilities**
- **State legislatures**
- **NGOs and State & Local Associations**

# Climate-Friendly Decisions in the Guide

## *Energy*

- Adopt stringent building energy codes
- Encourage renewables, energy-efficient technologies, and combined heat and power in electricity generation
- Encourage development and purchase of clean distributed generation units
- Implement renewables portfolio standards
- Implement or preserve public benefit funds
- Allow net metering
- Inform consumers about electricity fuel sources and emissions

## *Air Quality*

- Consider reducing GHG emissions when selecting State Implementation Plan (SIP) strategies
  - ◆ “upstream” energy efficiency
  - ◆ renewables
- Choose GHG-reducing technologies in Best Available Control Technology and Reasonably Available Control Technology (BACT/RACT) decisions

# *Climate-Friendly Decisions*

# Energy

## *Strategies*

- Increase energy efficiency in buildings
- Promote advanced, high-efficiency technologies
- Remove market barriers to renewable energy

## *Benefits*

- Lower energy costs
- Improve air quality
- Improve system reliability



DOE / NREL

## *Climate-Friendly Decisions -- Energy* Encourage Renewables, Energy-Efficient Technologies & Combined Heat & Power in Electricity Generation

- Promote advanced power generation technologies:
  - ◆ renewables
  - ◆ efficiency improvements
  - ◆ combined heat and power
  - ◆ distributed generation



Wind power - California

DOE/NREL

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# *Climate-Friendly Decisions*

## **Air Quality**

### *Energy*

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### *Air Quality*

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## *Climate-Friendly Decisions*

# Air Quality

### *Strategies*

- Incorporate energy efficiency and renewables into air quality plans
- Choose less energy intensive pollution control technologies

### *Benefits*

- Reduce criteria pollutants, air toxics and GHGs
- Lower compliance costs
- Save energy

## *Climate-Friendly Decisions*

# Reduce GHGs When Selecting SIP Strategies

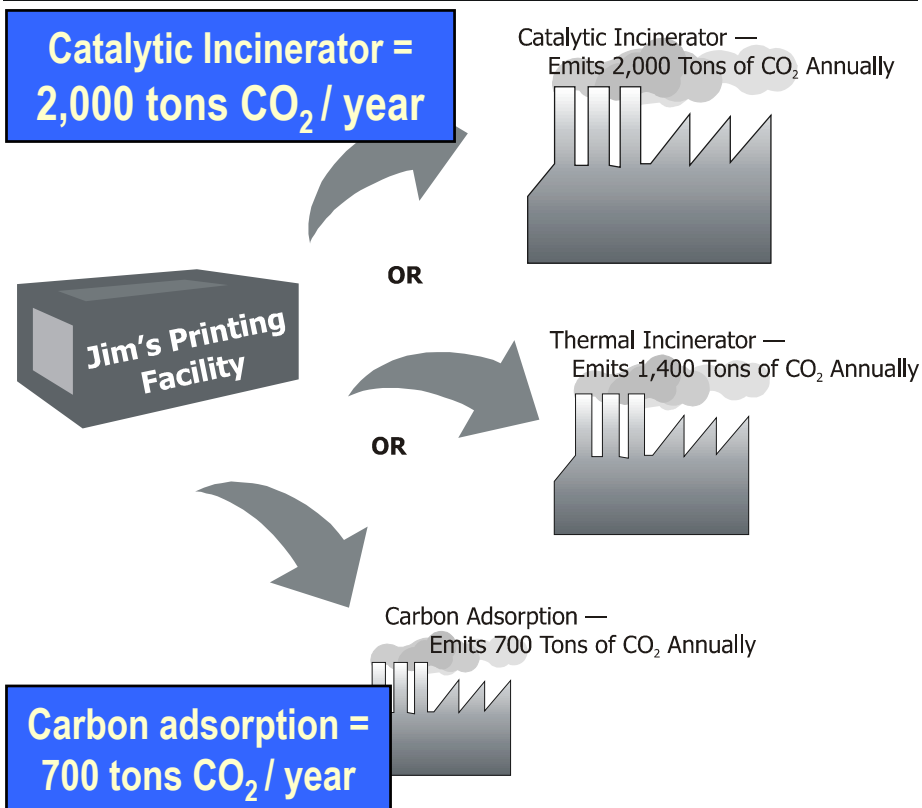
- **Consider GHGs when developing State Implementation Plans (SIPs)**
  - ◆ **Incorporate allowances for renewable energy and energy efficiency (NOx SIP Call States)**
  - ◆ **Incorporate energy efficiency measures into air pollution control strategies**
    - ✦ e.g., regional haze

# Climate-Friendly Decisions

## Choose GHG-Reducing BACT/RACT Technologies

- Choice of control technology can increase or decrease GHG emissions
- Choose strategies that lower GHGs and control criteria pollutants

**GOAL:** Reduce toluene emissions from 1,200 to 60 tons.



# Summary and Next Steps

- **Helps public officials identify and implement “climate-friendly” strategies**
- **Employing the nine strategies described in the guide will reduce GHGs with multiple benefits**
  - ◆ **Save energy and improve reliability**
  - ◆ **Improve air quality**
- **Available Winter ‘02**
  - ◆ **Sign-up sheet at exhibit booth**
- **Future topics: transportation, smart growth, public works and infrastructure**

# Contact Information

## Staff Contacts

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(state policies, harmonized  
strategies, copies of guide)

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